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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/003,697 | 10/31/2001 | Frank J. Kronzer | 11301-0222 (44039-264309) | 2526 |
| 22827 | 7590 | 07/28/2004 | EXAMINER | |
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| | | | ART UNIT | PAPER NUMBER |
| | | | 1774 | |
| DATE MAILED: 07/28/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/003,697 | KRONZER, FRANK J. | |
| | Examiner | Art Unit | |
| | Tamra L. Dicus | 1774 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>04-01-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The RCE and IDS is acknowledged.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application No. 10/003,698. Claims 1-30 are included in claims 1-32 of 10/003,698.

Claims 1-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21-40 of copending Application No. 09/614,829. Claims 1-30 are included in claims 21-40 of 09/614,829.

This is a provisional obviousness-type double patenting rejection.

Claim Objections

Claim 18 is objected to because of the following informalities: "the opaque crosslinked polymer layer" is not consistent with the language of claim 13, from which it depends. To make the antecedent basis clear claim 13 should include the language of claim 18, e.g. "a opaque crosslinked polymer layer" instead of "a crosslinked polymer layer having an opacifying material". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 9-12, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,358,660 to Agler et al. in view of USPN 6,551,692 to Dalvey et al.

Agler teaches a transfer sheet in this order: antistatic (25)/substrate (21)/barrier (22)/release (23)/image receiving (24). The barrier 22 comprises aziridine (multifunctional aziridine crosslinking agent) (col. 8, line 48), crosslinkable polymers such as acrylic (contains carboxyl groups (claim 4)) and other polymers (col. 10, line 60-col. 13), and whiteners (opacifying white pigment) (col. 10, line 53). Thus barrier 22 produces an opaque crosslinked polymer layer as claimed. The release is of polyurethane or acrylic resins (col. 14, line 30-35) as per instant claim 10. Rheology modifiers (control agents) are in the release (col. 15, lines 34-

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35) (instant claim 11). The substrate is a cellulosic nonwoven web or polyester film (col. 4, lines 42-45) per instant claim 12. Heat press or hand iron applies heat to the transfer and releases the image on receptors such as cotton fabrics such as T-shirts (col. 23, line 46-col. 24, line 12) (instant claim 28).

Agler does not teach a peelable film or the film over a release (instant claims 1 or 29-30) or the peelable film made of acrylic or polyolefin resins (instant claim 9). Dalvey teaches a image transfer sheet in this order: peel layer (16)/release (14)/substrate (12). Release (14) comprises silicon and acrylic polymers for release-enhancing properties (col. 5, line 60-col. 6, line 2) . Peel layer (16) transfers the image to a second substrate such as flexible or inflexible material. See col. 3, lines 20-60. The release and peel layers function together to give a smooth transfer (col. 6, lines 13-20). The peel layer is a film of low density polyethylene (LDPE) or ethylene vinyl acetate (EVA) or ethylene acrylic acid (EAA) (instant claim 9). See also col. 2, lines 25-35. It would have been obvious to one of ordinary skill in the art to modify the sheet of Agler to include a peel over the release to assist in transferring to a secondary substrate as disclosed (col. 3, line 50-68 of Dalvey) and to further include a peel layer of acrylic or polyolefin resins because Dalvey teaches such resins are conventional to add as they exhibit a suitable melt index range for heat transfer (col. 3, lines 40-60 of Dalvey).

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,358,660 to Agler et al. in view of USPN 6551692 to Dalvey et al., as applied to claim 1, and further in view of USPN 4,167,414 to Morgan.

Agler is relied upon above. Agler does not expressly disclose a crosslinkable printable film or the printable film adjacent the opaque crosslinkable polymer layer (instant claim 6). Morgan teaches a white layer (2) of titanium dioxide pigment, a polyfunctional aziridine crosslinker, and acrylic binder used in photographic transfer films. The polyfunctional aziridine crosslinker is used to improve the adherence/anchorage between the film base and opaque reflective layer. The white layer 2 of Morgan is printable because the same materials are taught. It would have been obvious to one of ordinary skill in the art to modify the transfer of Agler to include a crosslinked printable layer over the opaque crosslinkable polymer layer because Morgan teaches white layer 2 improves the anchorage/adhesion between it and the film base (col. 1, lines 56-68 of Morgan). Further to the capability of the crosslinked "printable" layer and that it is being printed by an ink jet printer (instant claim 8), that the crosslinked printable layer is able to be printed by an ink jet printer is not germane since it has been held that an element that is "being able to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

Claims 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,358,660 to Agler et al. in view of USPN 6551692 to Dalvey et al., and further in view of USPN 4,167,414 to Morgan.

Agler teaches a transfer sheet in this order: antistatic (25)/substrate (21)/barrier (22)/release (23)/image receiving (24). The barrier 22 comprises aziridine (multifunctional aziridine crosslinking agent) (col. 8, line 48), crosslinkable polymers such as acrylic (contains

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carboxyl groups) and other polymers (col. 10, line 60-col. 13), and whiteners (opacifying white pigment) (col. 10, line 53). Thus barrier 22 produces an opaque crosslinked polymer layer as claimed (instant claims 13, and 18-21). The release is of polyurethane or acrylic resins (col. 14, line 30-35) as per instant claim 15. Rheology modifiers (control agents) are in the release (col. 15, lines 34-35) (instant claim 16). The substrate is a cellulosic nonwoven web or polyester film (col. 4, lines 42-45) per instant claim 17.

Agler does not teach a peelable film or the film over a release (instant claim 13) or the peelable film made of acrylic or polyolefin resins (instant claim 14). Dalvey teaches a image transfer sheet in this order: peel layer (16)/release (14)/substrate (12). Release (14) comprises silicon and acrylic polymers for release-enhancing properties (col. 5, line 60-col. 6, line 2). Peel layer (16) transfers the image to a second substrate such as flexible or inflexible material. See col. 3, lines 20-60. The release and peel layers function together to give a smooth transfer (col. 6, lines 13-20). The peel layer is a film of low density polyethylene (LDPE) or ethylene vinyl acetate (EVA) or ethylene acrylic acid (EAA) (instant claim 14). See also col. 2, lines 25-35. It would have been obvious to one of ordinary skill in the art to modify the sheet of Agler to include a peel over the release to assist in transferring to a secondary substrate as disclosed (col. 3, line 50-68 of Dalvey) and to further include a peel layer of acrylic or polyolefin resins because Dalvey teaches such resins are conventional to add as they exhibit a suitable melt index range for heat transfer (col. 3, lines 40-60 of Dalvey).

Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,358,660 to Agler et al. in view of USPN 6551692 to Dalvey et al. and further in view of USPN 4,167,414 to Morgan.

Agler teaches a transfer sheet in this order: antistatic (25)/substrate (21)/barrier (22)/release (23)/image receiving (24). The barrier 22 comprises aziridine (multifunctional aziridine crosslinking agent) (col. 8, line 48), crosslinkable polymers such as acrylic (contains carboxyl groups) and other polymers (col. 10, line 60-col. 13), and whiteners (opacifying white pigment) (col. 10, line 53). Thus barrier 22 produces a crosslinked printable polymer layer as claimed (instant claim 22). The release is of polyurethane or acrylic resins (col. 14, line 30-35) as per instant claim 24. Rheology modifiers (control agents) are in the release (col. 15, lines 34-35) (instant claim 25). The substrate is a cellulosic nonwoven web or polyester film (col. 4, lines 42-45) per instant claim 26.

Agler does not teach a peelable film or the film over a release (instant claim 22) or the peelable film made of acrylic or polyolefin resins (instant claim 23). Dalvey teaches a image transfer sheet in this order: peel layer (16)/release (14)/substrate (12). Release (14) comprises silicon and acrylic polymers for release-enhancing properties (col. 5, line 60-col. 6, line 2). Peel layer (16) transfers the image to a second substrate such as flexible or inflexible material. See col. 3, lines 20-60. The release and peel layers function together to give a smooth transfer (col. 6, lines 13-20). The peel layer is a film of low density polyethylene (LDPE) or ethylene vinyl acetate (EVA) or ethylene acrylic acid (EAA) (instant claim 23). See also col. 2, lines 25-35. It would have been obvious to one of ordinary skill in the art to modify the sheet of Agler to include a peel over the release to assist in transferring to a secondary substrate as disclosed (col.

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3, line 50-68 of Dalvey) and to further include a peel layer of acrylic or polyolefin resins because Dalvey teaches such resins are conventional to add as they exhibit a suitable melt index range for heat transfer (col. 3, lines 40-60 of Dalvey).

Agler does not expressly disclose a crosslinked printable polymer over a peelable film. Morgan teaches a white layer (2) of titanium dioxide pigment, a polyfunctional aziridine crosslinker, and acrylic binder used to in photographic transfer films. The polyfunctional aziridine crosslinker is used to improve the adherence/anchorage between the film base and opaque reflective layer. The white layer 2 of Morgan is printable because the same materials are taught. Thus white layer 2 produces a crosslinked printable polymer. It would have been obvious to one of ordinary skill in the art to modify the transfer of Agler and Dalvey to include a crosslinked printable polymer over a peelable film because Morgan teaches crosslinked printable layer 2 improves the anchorage/adhesion between it and the film base (col. 1, lines 56-68 of Morgan). Further to the capability of the crosslinked "printable" layer that the crosslinked printable layer is able to be printed is not germane since it has been held that an element that is "being able to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchinson*, 69 USPQ 138.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 6,531,216 to Williams et al. teaches a heat sealable coating multilayer film using Surlyn 1702 crosslinked EMAA copolymer.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tamra L. Dicus
Examiner
Art Unit 1774

July 19, 2004



B. HAMILTON HESS
PRIMARY EXAMINER